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REMARKS

Claims 1-29 stand rejected under 35 U.S.C. § 103 as being unpatentable over Mian et al. in view of Kimura. Claims 1, 11 and 21 are independent. This rejection is respectfully traversed for the following reasons.

The Examiner admits that Mian et al. does not disclose a "continuous" track (spiral being one exemplary embodiment of a continuous track). The Examiner therefore relies on Kimura as disclosing a conventional CD optical disk having a spiral track, and thereby modifies Mian et al. to have a spiral, continuous track. However, it is respectfully submitted that none of the cited prior art disclose or suggest the *combination* of an assay with a continuous data band. Rather, Mian et al. discloses only an assay in combination with a data band using CD technology generally, whereas Kimura discloses only that conventional CD disks (non-assay disks; e.g., music CD's) can have spiral tracks. These individual teachings are not disputed. Indeed, Virtanen cited by Applicant in the Information Disclosure Statement dated July 16, 2001 discloses an assay with a CD reader for the software sector. However, as shown in Figure 1 of Virtanen, the software is written in the non-continuous sector format. In contrast, as described on page 10, line 12 – page 11, line 10 of Applicant's specification, the continuous data "band" format of the present invention can provide improved speed and automation over the prior art sector format.

Neither of the relied on portions of Mian et al. or Kimura suggest using the continuous data band specifically on an assay platform. In contrast, prior art assay platforms use the aforementioned sector format as evidenced by Virtanen. Kimura merely discloses that CD's

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(e.g., conventional music disks) can have spiral tracks, but such disclosure does not suggest using such configurations (nor continuous data bands) specifically with assay platforms.

It is respectfully submitted that the proposed combination is improper because the Examiner has not provided the requisite *objective* evidence *from the prior art* that "suggests the desirability" of the proposed combination. As is well known in patent law, a *prima facie* showing of obviousness can only be established if the prior art "suggests the desirability" of the proposed combination using objective evidence. The Examiner is directed to MPEP § 2143.01 under the subsection entitled "Fact that References Can Be Combined or Modified is Not Sufficient to Establish *Prima Facie* Obviousness", which sets forth the applicable standard:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (*In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990)).

In the instant case, even assuming *arguendo* that Mian et al. can be modified by Kimura, it is submitted that the "mere fact that [Mian et al. and Kimura] can be combined ... does not render the resultant combination obvious" because nowhere does the *prior art* "suggest the desirability of the combination" as set forth by the Examiner. The Examiner is further directed to MPEP § 2143.01 under the subsection entitled "Fact that the Claimed Invention is Within the Capabilities of One of Ordinary Skill in the Art is Not Sufficient by Itself to Establish *Prima Facie* Obviousness", which sets forth the applicable standard:

A statement that modifications of the prior art to meet the claimed invention would have been [obvious] because the references relied upon teach that all aspects of the claimed invention were *individually* known in the art is *not* sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. (citing *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)).

In the instant case, even assuming *arguendo* that Mian et al. and Kimura "teach that all aspects of the claimed invention [are] individually known in the art", it is submitted that such a conclusion

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"is not sufficient to establish a *prima facie* case of obviousness" because there is no *objective* reason on the record to combine the teachings of the cited prior art. In contrast, Mian et al. and Kimura are completely silent as to suggesting the *combination* of using continuous data bands with assay platforms to replace the conventional sectored CD shown in Virtanen.

Applicant is not simply claiming novelty to a continuous data band by itself, but rather, Applicants have invented the novel combination whereby a continuous data band replaces the conventional sectored CD of assay platforms (*see* Virtanen). As described on page 10, line 12 – page 11, line 10 of Applicant's specification, examples of benefits and advantages derived from the claimed combination over the prior art include automation, increased speed, elimination of "dead space", and seamless operation (user need not start/stop operation for respective assays, etc.). Only Applicant conceived and enabled a manner by which continuous data bands can be used in combination specifically with assay platforms.

It is submitted that patentable subject matter typically arises from using *known* elements in novel *combinations*. Accordingly, the Examiner's allegation that platform assays and continuous data bands on CD's are well-known *separately* is irrelevant to the determination of patentability for the *combination* thereof. At best, the Examiner has attempted to show only that the elements (i.e., assay platform and continuous data bands) of the claimed invention are *individually* known without providing a *prima facie* showing of obviousness that the *combination* of elements recited in the claims is known or suggested in the art. For all the foregoing reasons, it is respectfully submitted that the proposed combination is based solely on improper hindsight reasoning, whereby the Examiner selected bits and pieces of the prior art and used only Applicant's specification as a guide to reconstruct the claimed invention. None of the

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cited prior art, alone or in combination, disclose or suggest the combination of continuous data bands with assay platforms.

The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in claims 1, 11 and 21 because the proposed combination fails the "all the claim limitations" standard required under § 103.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claims 1, 11 and 21 are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

For example, claims 31, 33 and 35 enable the present invention to take advantage of all the existing technology for CD type drives (see, e.g., page 5, lines 14-17 of Applicant's specification), so as to allow a speed-up in processing as well as an elimination of start/stop operations, thereby increasing operational flexibility.

Based on all the foregoing, it is submitted that claims 1-35 are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

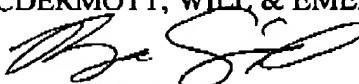
09/827,895**CONCLUSION**

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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